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(81) 指定国 (国内): CN, JP, US.

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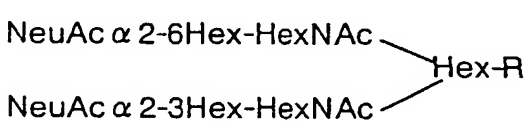
添付公開書類:
— 国際調査報告書

(54) Title: NOVEL BRANCHED SIALO-SUGAR MOLECULES AND ANTIVIRAL AGENTS USING THE SAME

(54) 発明の名称: 新規分岐状シアロ糖分子とそれを用いたウイルス剤



(I)

(57) Abstract: It is intended to provide novel branched sialo-sugar molecules represented by the following general formula (I) as substances which respond to variations in the host area of influenza viruses as well as variations in antigenicity and are useful as adsorbents in drugs and virus elimination filters whereby the infection with type A influenza virus and type B influenza virus originating in any animals including humans can be prevented: (I) wherein NeuAc represents N-acetylneuraminate in which the hydroxyl, carboxyl and amido may be chemically modified with halogeno, alkyl and acyl either identically or separately; Hex represents hexose; HexNAc represents N-acetylhexosamine; and R represents hydrogen, hydrocarbyl, a sugar chain, or a substrate selected from among lipids, proteins and synthetic polymers, each optionally being substituted; provided that the bond between N-acetylneuraminate and hexose may be either an O-glycoside bond occurring in nature or a chemically converted bond such as an S-glycoside or Se-glycoside bond.

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WO 03/074570 A1

INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP03/02338

A. CLASSIFICATION OF SUBJECT MATTER
Int.Cl[7] C08B37/00, A61K31/715, A61P31/16

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
Int.Cl[7] C08B37/00, A61K31/715

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
CA(STN), REGISTRY(STN), WPIDS(STN)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Van Pelt, Johannes; Hard, Karl; Kamerling Johannis P.; Vliegenthart, Johannes F.G.; Reuser, Arnold J. J.; Galjaard, Hans, Isolation and structural characterization of twenty-one sialyloligosaccharides from galactosialidosis urine. An intact N,N'-diacetylchitobiose unit at the reducing end of a diantennary structure, Biological Chemistry Hoppe-Seyler (1989), 370(3), 191-203	1,2

[X] Further documents are listed in the continuation of Box C. [ ] See patent family annex.

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier document but published on or after the international filing date
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed
"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
03 April, 2003 (03.04.03)	22 April, 2003 (22.04.03)
Name and mailing address of the ISA/ Japanese Patent Office	Authorized officer
Facsimile No.	Telephone No.

Form PCT/ISA/210 (second sheet) (July 1998)

ATTACHMENT F

INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP03/02338

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Strecker, Gerard; Peers, Marie Claire; Michalski, Jean Claude; Hondi-Assah, Theophile; Fournet, Bernard; Spik, Genevieve; Montreuil, Jean; Farriaux, Jean Pierre; Maroteaux, Pierre; Durand, Paolo, Structure of nine sialyl-oligosaccharides accumulated in urine of eleven patients with three different types of sialidosis. Mucolipidosis II and two new types of mucolipidosis, European Journal of Biochemistry (1977), 75(2), 391-403	1,2
A	Unverzagt, Garlo; Kelm, Soerge; Paulson, James C., Chemical and enzymic synthesis of multivalent sialoglycopeptides, Carbohydrate Research (1994), 251, 285-301	1-10